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EXAMINER

JACKSON, MONIQUE R

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



### **DETAILED ACTION**

1. The amendment filed 4/9/08 has been entered. Claims 2, 15, 21 and 23 have been canceled. Claims 1, 3-14, 16-20, 22, and 24-25 are pending in the application. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Terminal Disclaimer***

2. The terminal disclaimer filed on 4/9/08 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application Number 10/537,959 has been reviewed and is accepted. The terminal disclaimer has been recorded.

3. Accordingly, the double patenting rejection recited in paragraph 8 of the prior office action has been withdrawn.

#### ***Claim Rejections - 35 USC § 112***

4. Claims 1, 3-14, 16-20 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "by the following general formula (1)...wherein B is a quadrivalent organic group...Y is a divalent organic group...and may be the same or different; m:n is 100:0)" in lines 11-18. However, if n is equal to zero, as instantly claimed, that portion of the structure is moot, including the B and Y groups, and there would be no need to further define B and Y. Hence, it appears as if the ratio limitation is incomplete, rendering the claims unclear, particularly given the presence of a closed parenthesis after the "100:0" with no clear corresponding open parenthesis. Claims 12-14 and 20 are similarly rejected for the above reasons, and are further unclear given that they are incomplete

sentences, failing to include a period indicating the end of the claim limitations. Hence, it is unclear what is meant to be encompassed by the claims.

***Claim Rejections - 35 USC § 102***

5. Claims 24-25 are rejected under 35 U.S.C. 102(a), (b) or (e) as being anticipated by Katsuki et al for the reasons recited in the prior office action and restated below, wherein the Examiner notes that the three-layer film taught by Katsuki et al comprising a highly heat resistant polyimide base reads upon the claimed non-thermoplastic polyimide layer and the outer thermoplastic polyimide layers read upon the claimed thermoplastic polyimide resin layer on one face and the adhesive layer on the other face, and formation of the laminate even at ambient conditions reads upon “pressurization” given atmospheric pressure.

6. Katsuki et al teach that the polyimide film comprises a two- or three-layer film having a thermoplastic polyimide layer on one or both surfaces of a highly heat resistant polyimide base layer (*reads upon the claimed non-thermoplastic polyimide layer*) wherein the thermoplastic polyimide is formed from aromatic diamines and aromatic dianhydrides that read upon the claimed structures, and wherein the polyimide layers have thickness ranges that read upon the claimed thickness (Col. 3-Col. 4; Col. 5, lines 20-65.) Katsuki et al teach that the treated polyimide film has improved adhesion to metal formed by vapor deposition or a combination of vapor deposition and electroless plating and/or electroplating, wherein the metal layer comprises a first metal layer formed by vapor deposition, a second metal layer formed by vapor deposition and/or plating, and an outer metal layer formed by plating; wherein the first metal is preferably nickel, chromium, cobalt, palladium, nickel-copper alloy or others as claimed; the second and third layers may be copper (Col. 6-7.) Katsuki et al also teach laminate with a copper foil and

use of the laminate as a substrate in making FPCs, TAB tape carriers, multilayer FPCs, and rigid-flex circuit boards (Col. 7-8.)

***Response to Arguments***

7. Applicant's arguments filed 4/9/08 have been considered but are not persuasive and/or moot in view of the new ground(s) of rejection. With regards to Katsuki et al, the Applicant argues that Katsuki et al do not teach an adhesive layer or adhesive sheet laminated on the face of the non-thermoplastic polyimide film opposite the thermoplastic polyimide resin layer. However, as stated above, the Examiner takes the position that the three-layer structure taught by Katsuki et al reads upon the claimed invention given that one thermoplastic surface layer reads upon the claimed thermoplastic polyimide resin layer while the other thermoplastic polyimide surface layer reads upon the claimed "adhesive" layer or sheet.
8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 10:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Monique R Jackson/  
Primary Examiner, Art Unit 1794  
July 21, 2008